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APPLICATION NO.	FILED DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/707,886	11/08/2000	Lawrence R. Andrews	3700-2	9840
23117	7590	01/11/2005	EXAMINER	
NIXON & VANDERHYE, PC 1100 N GLEBE ROAD 8TH FLOOR ARLINGTON, VA 22201-4714			LGK, EMMANUEL S	
		ART UNIT	PAPER NUMBER	
		1722		

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/707,886	ANDREWS, LAWRENCE R.	
	Examiner Emmanuel S. Luk	Art Unit 1722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 12 October 2004.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-28 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) 18-28 is/are allowed.

6) Claim(s) 1-17 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Response to Arguments

1. In view of the appeal brief filed on 10/12/04, PROSECUTION IS HEREBY REOPENED. New grounds for rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-17 are rejected under 35 U.S.C. 101 because the claims contain both apparatus and method steps of using the apparatus and thus the claims are directed to neither a "process" nor a "machine", but rather embraces or overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of the invention in the alternative only. Id. at 1551. See MPEP §2173.05(p). Here, the claims direct one of the first and second structure applies

a preload pressure to the bearings in at least one direction normal to the mold movement path. This is a method limitation in an apparatus claim.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are indefinite and ambiguous since there are both apparatus and method steps of using the apparatus within the claims. Particularly, the claims direct one of the first and second structure applies a preload pressure to the bearings in at least one direction normal to the mold movement path. This is a method limitation in an apparatus claim.

Allowable Subject Matter

6. Claims 18-28 are allowed.

7. Claims 1-17 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

8. The following is a statement of reasons for the indication of allowable subject matter: In regards to claims 1-17, the closest prior art of reference, Kojima, teaches

at least two mold parts (13,14), at least one of said at least two mold parts moveable along a mold movement path with respect to the other of said at least two mold parts (Fig. 1, Fig. 2); and a guide mechanism for guiding said at least one moveable mold part comprising of a first structure (16) fixed to said at least one other mold part; a second structure (12) fixed to said at least one moveable mold part, wherein one of said first and second structures sandwiches at least a portion of the other of said first and second structures (Fig. 1, Fig. 2, Fig. 4); and a plurality of bearings (28) separating said first and second structures and permitting movement along said mold movement path. The first structure is surrounded by the second structure as seen in the figures and is the equivalent being sandwiched since on either sides of the first structure there is the second structure.

The condition of non-load upon the ball bearings, thereby having high dimensional accuracy of the ball bearings can be adopted (Col. 3, lines 61-63). However, it differs from the instantly claimed invention since it is operated, in at least one instance, for a non-load condition, whereas the claimed invention structurally has preload pressure upon the bearings. It is not clear whether or not the Kojima is capable at operation in load conditions.

The prior art of record, for claims 14-17, fail to teach at least three mold parts and a guide mechanism for guiding the moveable mold part into and out of the mold forming position with a first and second structure wherein the second structure sandwiches a portion of the first structure with a plurality of bearings separating the structure and a cam for moving the moveable mold part.

The prior art of record, for claims 18-28, fail to teach claimed guidance mechanism in the claimed apparatus comprising of an upper mold, lower mold and end plug, wherein the guide mechanism guides the end plug into and out of molding formation with one of the mold halves.

Response to Arguments

9. Applicant's arguments, see appeal brief, filed 10/12/04, with respect to the rejection(s) of claim(s) 1-17 under Zakich have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in regards to 35 USC §101 and 35 USC §112, second paragraph, as the claims contain both apparatus and method of using in the claims.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Abe (5529483) and Kojima (4744740).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel S. Luk whose telephone number is (571) 272-1134. The examiner can normally be reached on Monday-Thursday 7 to 4 and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ben Utech can be reached on (571) 272-1137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EL

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